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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,399	03/02/2004	Marcus T. Clark	14317	2571
7590		08/21/2007		
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			EXAMINER	
			MCCREARY, LEONARD	
			ART UNIT	PAPER NUMBER
			3616	
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			08/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/791,399	<b>Applicant(s)</b> CLARK ET AL.	
	<b>Examiner</b> Leonard J. McCreary, Jr.	<b>Art Unit</b> 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-34 is/are pending in the application.
- 4a) Of the above claim(s) 31-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 21 May 2007 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4, 6-10, 12-17, and 27-29 stand rejected under 35 U.S.C. 103(a) as being unpatentable over XP 007121366 to an unknown entity, hereinafter referred to as "366," in view of US 5611563 to Olson et al. '366 discloses a deformable diffuser for an airbag module comprising the following:

- a. An airbag inflator diffusion system, comprising: an airbag inflator having an exhaust gas exit port; a sleeve 10 having a longitudinal axis and shaped to receive the inflator securely within the sleeve, the sleeve expanding radially under a force of impinging exhaust gas, the sleeve comprising a structural stop 32 to limit the radial expansion of the sleeve (fig. 4) (claim 1.)
- b. A first longitudinal edge 20 of the sleeve overlaps a second longitudinal edge 22 along a length of the sleeve (claim 4.)
- c. A perforation 70 in the sleeve becomes exposed upon radial expansion of the sleeve (claim 6.)
- d. The perforation is positioned to allow exhaust gas to flow out of the sleeve through the perforation and into an inflatable cushion (page 2, lines 27-29) (claim 7.)
- e. The perforation overlays a portion of the inflator excluding the exit port (claim 8.)
- f. The inflator is an elongate inflator and the sleeve extends a length of the elongate inflator (page 2, lines 10-13) (claims 9, 27.)
- g. The structural stop allows the sleeve to expand radially a predetermined amount (fig. 4) (claims 10, 17.)
- h. The radial expansion of the sleeve forms an exhaust passage between the sleeve and the inflator (page 2, lines 13-18) (claim 12.)

- i. The sleeve comprises a solid section 18 positioned to receive direct impingement of the exhaust gas from the exit port and direct the exhaust gas through the exhaust passage (claim 13.)
  - j. A cross-sectional shape of the sleeve is substantially the same as a cross-sectional shape of the inflator (claims 14, 28.)
  - k. The sleeve has a mounting stud extending orthogonally therefrom (through 50, 52) (claims 15, 29.)
  - l. An airbag inflator diffuser, comprising: a sleeve 10 having a first longitudinal edge 20 that overlaps a second longitudinal edge 22 along a length of the sleeve, the sleeve expanding radially under a force of impinging exhaust gas from an exit port of an inflator when installed within the sleeve; and a structural stop 32 to limit the radial expansion of the sleeve (fig. 4) (claim 16.)
2. '366 does not teach crimped tabs. Olson discloses an airbag inflator having a snap-in sleeve and teaches:
- m. A crimped tab 22 being added to a proximal end of the sleeve 17, wherein the crimped tabs are folded inward to hold the inflator 12 within the sleeve during deployment, wherein when the crimped tabs are folded inwards, the tabs are substantially transverse to the longitudinal axis of the sleeve (fig 1) (claims 1, 16).
3. It would have been obvious to one of ordinary skill in the art at the time the apparatus was made to modify the deformable diffuser of '366 to include crimped tabs at proximal and distal ends of the sleeve as taught by Olson so as to retain the inflator in the sleeve (col 4, lin 20-30) (figs 6-7). Though Olson shows a single tab, it would

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have been obvious to one having ordinary skill in the art at the time the invention was made to construct the assembly of '366 having a plurality of tabs, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

4. Claim 30 stands rejected under 35 U.S.C. 103(a) as being unpatentable over JP2000211465 to Yu et al. in view of US 5611563 to Olson et al. Yu discloses an airbag device for a vehicle comprising the following:

n. An airbag inflator diffusion system, comprising: an airbag inflator 14 having an exhaust gas exit port; a sleeve 20 having a first longitudinal edge 22 that overlaps a second longitudinal edge along a length of the sleeve, the sleeve expanding radially to form an exhaust passage under a force of impinging exhaust gas from the exit port of the inflator installed within the sleeve, the sleeve having a perforation 23 adjacent the first longitudinal edge and a tab 28 adjacent the second longitudinal edge, such that the tab is shaped to engage the perforation upon radial expansion of the sleeve to limit expansion (figs. 1, 2) (claim 30.)

5. Yu does not teach crimped tabs. Olson discloses an airbag inflator having a snap-in sleeve and teaches:

o. A crimped tab 22 being added to a proximal end of the sleeve 17, wherein the crimped tabs are folded inward to hold the inflator 12 within the sleeve during

deployment, wherein when the crimped tabs are folded inwards, the tabs are substantially transverse to the longitudinal axis of the sleeve (fig 1) (claims 1, 16).

6. It would have been obvious to one of ordinary skill in the art at the time the apparatus was made to modify the deformable diffuser of Yu to include crimped tabs at proximal and distal ends of the sleeve as taught by Olson so as to retain the inflator in the sleeve (col 4, lin 20-30) (figs 6-7). Though Olson shows a single tab, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the assembly of '366 having a plurality of tabs, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

7. Claims 2-3, 5, and 18-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over XP 007121366 to an unknown entity in view of JP2000211465 to Yu et al., and further in view of US 5611563 to Olson et al. as applied to claims 1, 16, and 30 above. The disclosure of '366 is discussed above and further discloses:

- p. The perforation is positioned to allow exhaust gas to flow out of the sleeve through the perforation and into an inflatable cushion (claim 23).
- q. The perforation overlays a portion of the inflator excluding the exit port (claim 24).
- r. The radial expansion of the sleeve forms an exhaust passage between the sleeve and the inflator (claim 25).

s. The sleeve comprises a solid section positioned to receive direct impingement of the exhaust gas from the exit port and direct the exhaust gas through the exhaust passage (claim 26).

8. '366 does not teach tabs or hooks engaging perforations. Yu discloses an airbag device for a vehicle and teaches:

t. The structural stop comprises a tab 28 and a perforation 23, such that the tab is shaped to engage the perforation upon radial expansion of the sleeve to limit expansion (claims 2, 18).

u. The structural stop comprises a hook 28 and a perforation 23, such that the hook engages the perforation upon radial expansion of the sleeve to limit expansion (claims 3, 19).

v. The first longitudinal edge is slidably movable with respect to the second longitudinal edge under the force of impinging exhaust gas (figs. 1, 2) (claims 5, 21).

w. The perforation is adjacent the first longitudinal edge and the tab is adjacent the second longitudinal edge (claim 20).

x. The perforation is adjacent the first longitudinal edge and the tab is adjacent the second longitudinal edge (claim 22).

9. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the deformable diffuser of '366 to include the tabs/hooks and perforations to create a slidably engaging structural stop as taught by Yu so as to allow disengagement of the tabs/hooks and perforations to facilitate simplified replacement of

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the inflator while the assembly is installed in the vehicle and the side of the diffuser cannot be accessed to slide the inflator out of the sleeve.

### ***Response to Arguments***

10. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard J. McCreary, Jr. whose telephone number is 571-272-8766. The examiner can normally be reached on 0700-1700 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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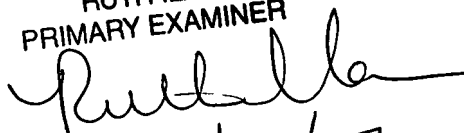
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Leonard J. McCreary, Jr.  
Examiner  
Art Unit 3616

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RUTH ILAN  
PRIMARY EXAMINER

  
8/20/07